Rule Fact Sheet

March 3, 2004

DEVELOPMENT OF NEW RULES CONCERNING INCORPORATION BY REFERENCE OF NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SURFACE COATING OF LARGE APPLIANCES; SURFACE COATING OF METAL COIL; PAPER AND OTHER WEB COATING; FLEXIBLE POLYURETHANE FOAM FABRICATION OPERATIONS; MUNICIPAL SOLID WASTE LANDFILLS; FRICTION MATERIALS MANUFACTURING FACILITIES; AND POLYVINYL CHLORIDE AND COPOLYMERS PRODUCTION

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Overview

This rulemaking adds national emission standards for hazardous air pollutants (NESHAP) for new and existing plant sites for seven categories of sources.

Citations Affected

Adds 326 IAC 20-63; 326 IAC 20-64; 326 IAC 20-65; 326 IAC 20-66; 326 IAC 20-67; 326 IAC 20-68; 326 IAC 20-69.

Affected Persons

1) Four potential surface coating of large appliance sources; 2) Nine potential surface coating of metal coil sources; 3) Twelve potential paper and other web coating sources; 4) Four potential flexible polyurethane foam fabrication operations; 5) Twelve potential municipal solid waste landfill sources; 6) Two potential friction material manufacturing sources; 7) No potential polyvinyl chloride and copolymers production sources at this time. Citizens of Indiana are affected by the improved air quality.

Reason for the Rule

IDEM must incorporate the federal NESHAP requirements into state rules or establish state requirements that are no less stringent than the NESHAP.

Economic Impact of the Rule

Because these emission standards are federal requirements and businesses are required to comply with the federal requirements, the state rulemaking will not result in additional costs to the regulated entities beyond the costs imposed by the federal rules.

Benefits of the Rule

This regulation reduces hazardous air pollutants from several sources subject to the applicable NESHAP. Citizens will benefit by the improved air quality this rule will ensure.

Description of the Rulemaking Project

The 1990 Amendments to the Clean Air Act require the United States Environmental Protection Agency (U.S. EPA) to regulate major sources of hazardous air pollutants (HAPs). A major source is defined as any stationary source or group of stationary sources located within a contiguous area and under common control that has the potential to emit, considering controls, ten tons per year or more of any single hazardous air pollutant or twenty-five tons per year or more of any combination of HAPs. HAPs are listed by U.S. EPA because they are either known or suspected to cause cancer or other serious health effects. There are currently one hundred eighty-eight HAPs listed in the Clean Air Act. On July 16, 1992 (57 FR 311576), U.S. EPA published a list of industrial groups or source categories that emit one or more of the one hundred eighty-eight listed HAPs. The Clean Air Act requires U.S. EPA to develop emission standards, referred to as national emission standards for hazardous air pollutants (NESHAPs), that require the application of air pollution reduction measures based on maximum achievable control technology (MACT) for the listed source

categories. The "MACT floor" is the minimum control level allowed for NESHAPs and ensures that the standard is set at a level that assures that all existing major sources achieve the level of control at least as stringent as that already achieved by the better-controlled and lower-emitting sources in each source category or subcategory. For new sources, the MACT floor cannot be less stringent than the emission control that is achieved in practice by the best-controlled similar source.

IDEM must incorporate the federal requirements into state rules or establish state requirements that are no less stringent than the federal requirements. This rulemaking will incorporate by reference the following NESHAPs:

Surface Coating of Large Appliances

On July 23, 2002, the U.S. EPA published a final NESHAP (67 FR 48254) to reduce HAP emissions for large appliance surface coating operations at major sources. Surface coating of large appliances typically emit the following HAPs: glycol ethers, methylene diphenyl diisocyanate, methyl ethyl ketone, toluene, and xylene. These compounds account for over eighty percent of the nationwide HAP emissions from this source category. Large appliances include "white goods" such as ovens, refrigerators, freezers, dishwashers, laundry equipment, trash compactors, water heaters, comfort furnaces, and electric heat pumps. However, not included in the source category are motor vehicle air-conditioning units, heat transfer coils, and large commercial and industrial chillers. A coating operation not included in the source category is the coating of appliance parts that have a wider use beyond large appliances (handles or fasteners). Typically, these facilities are designated as North American Industry Classification System (NAICS) codes 33522, 333312, 333415, and 333319. In Indiana, four sources have been identified that may be subject to the NESHAP.

The final NESHAP requires existing sources to limit emissions to no more than 0.13 kilograms organic HAP per liter of coating solids used each month. The emission standard for new sources is 0.022 kilograms organic HAP per liter of coating solids used each month. These limits apply to the total of all coatings, thinners, and cleaning materials used in coating operations at the affected source. There are three compliance options available for meeting the emission limits. The first option is a compliant material option that requires each coating used in the operation meet the limit, and each thinner and cleaning material must contain no organic HAP. The second option is an emission rate without an add-on controls option, where the source averages all of the coatings, thinners, and cleaning materials together to demonstrate that the overall emission rate is in compliance with the applicable limit. The third option is available to coating operations at the source using add-on controls. Under this option, the source must meet operating limits for the capture and control devices and follow work practice standards for material storage, mixing, conveying, and spills. Existing sources subject to the NESHAP must comply by July 23, 2005, and new and reconstructed sources must comply upon startup.

Surface Coating of Metal Coil

On June 10, 2002, the U.S. EPA published a final NESHAP (67 FR 39794) to reduce HAP emissions from the surface coating of metal coil at major sources. Technical corrections to the rule were published on March 17, 2003 (68 FR 12590). The key HAP emissions from this source category are methyl ethyl ketone, glycol ethers, xylenes, toluene, and isophorone. A metal coil coating operation is the application system used to apply an organic coating to the surface of metal coil that is at least 0.15 millimeter thick. The majority of sources are designated as NAICS code 332812. In Indiana, nine sources have been identified as potentially subject to the NESHAP.

The final NESHAP gives the options of limiting organic HAP emissions according to one of the following three levels: (1) No more than two percent of the organic HAP applied; no more than 0.046 kilogram of organic HAP per liter (kg/l) of solids applied during each 12-month compliance period; or (3) for sources using an oxidizer to control organic HAP emissions, an outlet organic HAP concentration of no greater than twenty parts per million by volume (ppmv) on a dry basis with capture efficiency of one-hundred percent. A source may comply through a pollution prevention

approach by applying only coating materials that meet the emission rate limit. Existing sources subject to the regulation must comply by June 10, 2005, and new and reconstructed sources must comply upon startup.

Paper and Other Web Coating

On December 4, 2002, the U.S. EPA published a final NESHAP (67 FR 72330) to reduce HAP emissions from paper and other web coating operations. The organic HAP emitted from the paper and other web coating process include, toluene, methanol, methyl ethyl ketone, xylenes, phenol, methylene chloride, ethylene glycol, glycol ethers, hexane, methyl isobutyl ketone, cresols and cresylic acid, dimethylformamide, vinyl acetate, formaldehyde, and ethyl benzene. The paper and other web coating source category includes any facility that is located at a major source and is engaged in the coating of paper, plastic, film, metallic foil, and other web surfaces. Web coating refers to the application of a continuous layer of coating material across the entire width or any portion of the width of a web substrate, and any associated curing/drying equipment between an unwind or feed station and a rewind or cutting station where the continuous web substrate is flexible enough to be wound or unwound as rolls. Affected sources are identified by numerous NAICS codes; common ones are 322221, 322222, and 322299, and 325992. In Indiana, twelve sources have been identified that may be subject to the NESHAP.

The final NESHAP expresses the emission limit in three formats based on whether HAP emissions are measured in terms of mass of organic HAP applied, mass of coating material applied, or mass of coating solids applied. The three HAP emission limits for existing affected sources are: (1) limit emissions to no more than five percent of the mass of organic HAP applied each month; (2) limit the total mass of organic HAP in the coating materials, or the total mass of organic HAP emitted, to no more than four percent of the total mass of coating materials applied to the web substrate each month; or (3) limit the total mass of the organic HAP in the coatings, or the total mass of organic HAP emitted, to no more than twenty percent of the total mass of coating solids applied to web substrates each month. Alternatively, sources using an oxidizer to control organic HAP emissions may choose to operate the oxidizer such that an outlet HAP concentration of no greater than twenty parts per million by volume (ppmv) by compound on a dry basis is achieved. Existing sources subject to the regulation must comply by December 5, 2005, and new and reconstructed sources must comply upon startup.

Flexible Polyurethane Foam Fabrication Operations

On April 14, 2003, the U.S. EPA published a final NESHAP (68 FR 18062) to reduce HAPs from flexible polyurethane foam fabrication operations at major sources. The primary HAPs that will be controlled by this rule include hydrochloric acid, 2,4-toluene diisocyanate, and hydrogen cyanide. This rule will also preclude the use of methylene chloride. This source category includes operations engaged in cutting, gluing, and/or laminating pieces of flexible polyurethane foam. There are two subcategories identified in the rule, loop slitter adhesive use and flame lamination. Affected sources are identified by the NAICS code 32615. In Indiana, four (4) sources have been identified as potentially subject to the federal NESHAP.

Sources operating an existing, new, or reconstructed loop slitter are prohibited from using any HAP-based adhesive in the final rule. HAP-based adhesive is defined as adhesives containing more than five percent HAP by weight. Sources operating an existing flame lamination source are not subject to an emission limitation, although these sources are required to submit an initial notification. Sources operating a new or reconstructed flame lamination source are required to reduce HAP emissions by ninety percent. Existing sources subject to the regulation must comply by April 14, 2004, and new and reconstructed sources must comply upon startup.

Municipal Solid Waste Landfills

On January 16, 2003, the U.S. EPA published a final NESHAP (68 FR 2227) to reduce HAP emissions from municipal solid waste landfills.

Emissions from landfills include numerous HAPs including, but not limited to, vinyl chloride, ethyl benzene, toluene, and benzene. The NESHAP applies to all municipal solid waste landfills that are major sources or are collocated with a major source, and to some landfills that are area sources. Area sources are those that have the potential to emit less than ten tons per year (tpy) of any individual HAP or twenty-five tpy total HAP. To be an affected source, the landfill (conventional landfill or bioreactor) must have accepted waste since November 8, 1987, or have additional capacity for waste disposal. Affected sources are identified by the NAICS codes 924110 and 562212. In Indiana, twelve sources have been identified as potentially subject to the federal rule.

The final NESHAP contains the same requirements as the emission guidelines (EG)/New source performance standards (NSPS) for municipal solid waste landfills (326 IAC 8-8), plus startup, shutdown, and malfunction (SSM) definition and reporting of deviations for out-of-range monitoring parameters. Existing sources subject to this regulation must comply with the additional requirements of the final rule (that are over and above the EG/NSPS) by January 16, 2004, and new and reconstructed sources must comply upon startup.

Friction Material Manufacturing Facilities

On October 18, 2002, the U.S. EPA published a final NESHAP (67 FR 64498) to reduce HAP emissions from major sources of friction material manufacturing. The key HAP emissions from this source category are n-hexane, toluene, and trichloroethylene. Friction materials manufacturing includes any facility engaged in the manufacture of friction materials such as brake and clutch linings. The NESHAP specifically regulates solvent mixers using a solvent containing one or more HAPs as an ingredient to the friction material composition. Affected sources are identified by the NAICS codes 33634, 327999, and 333613. In Indiana, two sources have been identified as potentially subject to the federal rule.

The final NESHAP requires existing and new large solvent mixers to limit emissions of total organic HAPs to the atmosphere to thirty percent or less of that which would otherwise be emitted in the absence of solvent recovery and/or solvent substitution, based on a seven day block average. Small solvent mixers will be required to limit emissions of total organic HAP discharged to the atmosphere to fifteen percent or less of that which would otherwise be emitted in the absence of solvent recovery and/or solvent substitution, based on a seven day block average. Existing sources subject to the regulation must comply by October 18, 2005, and new and reconstructed sources must comply upon startup.

Polyvinyl Chloride and Copolymers Production

On July 10, 2002, the U.S. EPA published a final NESHAP (67 FR 45886) to reduce HAPs from polyvinyl chloride (PVC) and copolymers production. The NESHAP requires that PVC and copolymers production facilities, which already must comply with the existing Vinyl Chloride NESHAP, continue to comply with that existing NESHAP. This rule reflects EPA's determination that the HAP control level resulting from compliance with the existing Vinyl Chloride NESHAP already reflects the application of MACT, and thus, meets the requirements of Section 112(d) of the CAA, except for equipment leaks at new sources. For equipment leaks, new sources must comply with the most current technology standards in the Generic MACT (40 CFR part 60, Subpart YY) rule. By requiring compliance with the Vinyl Chloride NESHAP, the U.S. EPA is promoting regulatory consistency and eliminating the costs that would be incurred by enforcing a new set of standards that would likely result in no additional HAP emissions reductions. Affected sources are identified by the NAICS code 325211. No potentially affected sources have been identified in Indiana.

Scheduled Hearings

First Public Hearing: March 3, 2004

Consideration of Factors Outlined in Indiana Code 13-14-8-4

Indiana Code 13-14-8-4 requires that in adopting rules and establishing standards, the board shall take into account the following:

1) All existing physical conditions and the character of the area affected.

2) Past, present, and probable future uses of the area, including the character of the uses of surrounding areas.

3) Zoning classifications.

4) The nature of the existing air quality or existing water quality, as appropriate.

5) Technical feasibility, including the quality conditions that could reasonably be achieved through coordinated control of all factors affecting the quality.

6) Economic reasonableness of measuring or reducing any particular type of pollution.

(7) The right of all persons to an environment sufficiently uncontaminated as not to be injurious to:

(A) human, plant, animal, or aquatic life; or

(B) the reasonable enjoyment of life and property.

Consistency with Federal Requirements

The new rules are consistent with federal rules

Rulemaking Process

The first step in the rulemaking process is publication of one of three types of notices in the *Indiana Register*. The first types of notice is a first notice of comment period. The first notice of comment period includes a discussion of issues and opens a first comment period. A second notice is then published which contains the comments and the departments responses from the first comment period, a second notice of comment period, a notice of first meeting/hearing, and the draft rule. The second type of notice is a section 7 notice. A section 7 notice contains a determination by the commissioner under IC 13-14-9-7 that only one comment period is required. It contains the commissioner's determination and findings, the draft rule, a request for written comments and a notice of first meeting/hearing. The third type of notice is a section 8 notice. A section 8 notice contains a determination by the commissioner under IC 13-14-9-8 that no public comment periods are required. It contains the commissioner's determination and findings, the draft rule and a notice of first meeting/hearing. In each case the Air Pollution Control Board holds the first meeting/hearing and public comments are heard. The proposed rule is published in the *Indiana Register* after preliminary adoption along with a notice of second meeting/hearing. If the proposed rule is substantively different from the draft rule, a third comment period is required. The second public meeting/hearing is held and public comments are heard. Once final adoption occurs, the rule is reviewed for form and legality by the Attorney General, signed by the Governor, and becomes effective 30 days after filing with the Secretary of State.

IDEM Contact

Additional information regarding this rulemaking action can be obtained from Gayl Killough, Rules Development Section, Office of Air Quality, (317) 233-8628 or (800) 451-6027, press 0, and ask for extension 3-8628 (in Indiana).